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April 10, 2007

VIA E-FILING AND HAND DELIVERY

Charles L.A. Terreni
Chief Clerk/Administrator
South Carolina Public Service Commission
101 Executive Center Dr., Suite 100
Columbia, SC 29210

Re: Petition of the Office of Regulatory Staff to Establish Dockets to Consider
Implementing the Requirements of Section 1251 (Net Metering and Additional
Standards) of the Energy Policy Act of 2005
PSC Docket No.: 2005-385-E

Dear Mr. Terreni:

Enclosed please find the original and one copy of the Direct Testimony and Exhibits of A. Randy Watts in the above referenced docket.

Please note that the attached documents are exact duplicates, with the exception of the form of the signature, of the e-filed copy submitted to the Commission in accordance with its electronic filing instructions.

By copy of this letter we are also serving all other parties of record. Please let me know if you have any questions.

Sincerely,

Nanette S. Edwards
Shannon Bowyer Hudson

NSE-SBH/pjm
Enclosure

cc: Parties of Record

THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY AND EXHIBITS

OF

A. RANDY WATTS

APRIL 10, 2007



DOCKET NO. 2005-385-E

EPAct 2005 - Net Metering

**TESTIMONY OF
A. RANDY WATTS
ON BEHALF OF
THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
DOCKET NO. 2005-385-E**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND
OCCUPATION.**

A. My name is Randy Watts. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201. I am employed by the State of South Carolina as Program Manager of the Electric Department for the Office of Regulatory Staff ("ORS").

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
EXPERIENCE.**

A. I received a Bachelor of Science Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by the Public Service Commission of South Carolina ("Commission") as a Utilities Engineer in the Electric Department and was promoted to Chief of the Electric Department in August 1981. Subsequent to internal Commission restructuring, my position was designated Chief of Electric in October 1999. I remained in that role until transferring to my current position with ORS in January 2005. I have testified on numerous occasions before the Commission in conjunction with fuel clause, territorial assignment, Siting Act, complaint and general rate proceedings.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
2 **PROCEEDING?**

3 **A.** The purpose of my testimony is to provide the Office of Regulatory
4 Staff's remarks regarding consideration of the implementation of Net
5 Metering and certain Additional Standards as required under Section 1251 of
6 the Energy Policy Act of 2005 ("EPAct").

7 **Q. WHICH ELECTRIC UTILITIES IN SOUTH CAROLINA ARE**
8 **SUBJECT TO THIS PROCEEDING?**

9 **A.** The South Carolina retail operations of Duke Energy Carolinas, LLC,
10 Carolina Power & Light d/b/a Progress Energy Carolinas, Inc., and South
11 Carolina Electric & Gas Company.

12 **Q. PLEASE ELABORATE ON THE REQUIREMENTS OF SECTION**
13 **1251 OF THE ENERGY POLICY ACT OF 2005.**

14 **A.** Under EPAct 2005, state commissions are required to consider certain
15 standards to encourage better utilization of energy resources with respect to
16 each electric utility for which the state commission has ratemaking authority.
17 Specifically, Section 1251 requires states to consider, but does not mandate:
18 (1) implementation of Net Metering service, (2) development of a plan to
19 minimize dependence on one fuel source and ensure power generated for
20 consumer consumption is from a diverse range of fuels and technologies, and
21 (3) development of a 10-year plan to increase the efficiency of the utility's
22 fossil fuel generation.

1 In considering each standard the commission is to make a
2 determination as to whether or not it is appropriate to implement such
3 standard. If the commission has previously implemented or conducted a
4 proceeding with regards to a particular standard or the state legislature has
5 voted on the implementation of a standard, then the commission is not
6 required to take any action on that standard.

7 **Q. MR. WATTS, ARE YOU AWARE OF ANY COMMISSION ORDERS**
8 **OR SOUTH CAROLINA STATUTES ADDRESSING DEVELOPMENT**
9 **OF A PLAN TO MINIMIZE DEPENDENCE ON ONE FUEL SOURCE**
10 **AS WELL AS UTILIZATION OF A DIVERSE RANGE OF FUELS**
11 **AND TECHNOLOGIES FOR THE GENERATION OF POWER?**

12 **A.** Yes. The Commission currently requires by order an annual filing
13 from each of the electric utilities a fifteen year plan addressing load forecast,
14 plant efficiency measures, and resource diversity among other issues. These
15 filings are generally referred to as Integrated Resource Plans or IRPs and are
16 filed pursuant to Commission Order No. 98-502. In addition, South Carolina
17 Code Ann. Section 58-33-430 requires that electric utilities prepare and file a
18 ten year forecast of loads and resources as well as a list of the major utility
19 facilities that will be necessary to meet system requirements during the
20 forecast period. Pursuant to S.C. Code Ann. Section 58-27-865, the
21 Commission established annual prudence proceedings to review the fuel
22 purchasing practices and costs associated with power supplied to retail
23 consumers by the three major investor-owned electric utilities. In conjunction

1 with this process, the utilities are required to file monthly reports detailing
2 plant operations and fuel costs which allow continuing review and monitoring
3 by ORS.

4 The Commission has also issued orders establishing rates for the
5 purchase of power by the investor-owned utilities from Qualifying Facilities
6 or QFs as required by the Public Utility Regulatory Policies Act of 1978
7 ("PURPA") which was one part of the National Energy Act. The purpose of
8 this section of PURPA was to encourage conservation of energy and efficient
9 use of energy resources by encouraging production of electric power by
10 cogeneration and small power producers.

11 **Q. ARE THERE ANY COMMISSION ORDERS, SOUTH CAROLINA**
12 **STATUTES OR OTHER STATE REGULATORY ACTIVITIES THAT**
13 **ADDRESS THE DEVELOPMENT OF A 10-YEAR PLAN TO**
14 **INCREASE THE EFFICIENCY OF THE UTILITIES' FOSSIL FUEL**
15 **GENERATION?**

16 **A.** Yes. The previously discussed IRP filings along with the annual fuel
17 proceedings and the monthly fuel and plant operations reports address this
18 issue also. In addition, during calendar year 2006 ORS performed a detailed
19 and extensive analysis and study of each of the three investor-owned electric
20 utilities' fuel costs and purchasing policies which were filed with the
21 Commission. These studies included an extensive review of such areas as fuel
22 procurement, transportation of fuel, generation planning, fuel mix, purchased
23 power, and inventory management among others. It is important to note here

1 also that several of our State's IOU's coal-fired plants have consistently been
2 ranked in the top twenty by heat rate efficiency for many years. This lends
3 further credence to the position that the systems currently in place support
4 efficient plant operations in South Carolina.

5 **Q. WHAT IS YOUR OPINION OF THE GENERATION RESOURCE MIX**
6 **OF THE THREE INVESTOR-OWNED ELECTRIC UTILITIES?**

7 **A.** As demonstrated by Exhibit ARW-1, the IOUs have a diverse range of
8 generation mix which resulted from a combination of all the activities
9 associated with the continuing reviews, analyses and proceedings mentioned
10 previously. The mix includes energy from all the major proven technological
11 sources of generation. One additional important facet of the process for
12 ensuring the most appropriate resource selection includes the certification
13 requirements for new resource additions required by the South Carolina
14 Utility Facility Siting and Environmental Protection Act. Among
15 requirements that must be met are: (1) the basis for the need of the proposed
16 facility, (2) that it will serve the interests of system economy and reliability,
17 and (3) that consideration be given to the nature and economics of the various
18 alternatives.

19 **Q. FROM YOUR ANALYSIS, HAVE YOU CONCLUDED THAT THESE**
20 **TWO ADDITIONAL STANDARDS UNDER SECTION 1251 OF**
21 **EPACT HAVE BEEN ADDRESSED?**

22 **A.** Yes.

1 **Q. MR. WATTS, WHAT IS YOUR UNDERSTANDING OF THE TERM**
2 **NET METERING SERVICE?**

3 **A.** The language in EPAcT states that “net metering service” means
4 service to an electric consumer under which electric energy generated by that
5 electric consumer from an eligible on-site generating facility and delivered to
6 the local distribution facilities may be used to offset electric energy provided
7 by the electric utility to the consumer during the applicable billing period.

8 More simply stated, net metering originated as a way to encourage
9 consumers to invest in renewable energy sources such as solar or wind power.
10 Generally, in a net metering program, the IOU allows a customer’s meter to
11 run in reverse if the electricity the customer generates is more than the
12 customer is consuming. Generally speaking, at the end of the billing period,
13 the customer only pays for his or her net consumption, which is the amount of
14 resources consumed, minus the amount of resources generated.

15 **Q. MR. WATTS, ARE YOU AWARE OF ANY COMMISSION ORDERS**
16 **OR SOUTH CAROLINA STATUTES ADDRESSING**
17 **CONSIDERATION OF THE IMPLEMENTATION OF NET**
18 **METERING SERVICE?**

19 **A.** I am not aware of any specific State statutes or Commission orders that
20 have been promulgated or issued regarding the availability of Net Metering
21 service to the electric consumers in South Carolina.

1 **Q. WHAT IS ORS'S POSITION WITH REGARDS TO THE INVESTOR-**
2 **OWNED ELECTRIC UTILITIES IN SOUTH CAROLINA OFFERING**
3 **NET METERING SERVICE TO THEIR CONSUMERS?**

4 **A.** ORS believes this proceeding offers a unique opportunity for South
5 Carolina to adopt a program for Net Metering that is beneficial, equitable, and
6 fair to both the retail ratepayers and investor-owned electric utilities in South
7 Carolina. For various reasons many other states have previously reviewed or
8 addressed the net metering issue. As a result, South Carolina can not only take
9 advantage of the beneficial outcomes and developments achieved from the
10 experience of others but also avoid some of the arduous process and pitfalls
11 that other jurisdictions have undergone. As a result, South Carolina can adopt
12 a program that will be the best fit for our State.

13 **Q. DOES ORS HAVE A RECOMMENDATION FOR IMPLEMENTING**
14 **NET METERING SERVICE IN SOUTH CAROLINA?**

15 **A.** Yes. ORS is aware that two of the three investor-owned utilities in
16 South Carolina, namely Progress Energy Carolinas Inc. and Duke Energy
17 Carolinas, LLC, already have a net metering service program that was adopted
18 in their North Carolina jurisdiction in late 2005. We have evaluated the North
19 Carolina program and consider it to be reasonable and appropriate for
20 implementation in South Carolina. We believe this has the potential to
21 promote utilization of renewable resources by providing consumers a more
22 economical opportunity for self-generation. Utilizing this program will also

1 allow for the sharing of existing synergies and arguably mitigate associated
2 costs that would be borne by the participants.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4 **A.**Yes it does.

Percent Generation Mix by Fuel Type and Purchased Power 2005
Docket No. 2005-385-E

	<u>SCE&G</u>¹	<u>DEC</u>²	<u>PEC</u>³
Nuclear	19.0%	47.0%	39.5%
Coal	68.0%	50.9%	48.3%
Natural Gas/Oil	6.3%	0.0%	3.6%
Hydro	4.7%	1.6%	1.2%
Purchased	2.0%	0.5%	7.4%

¹ South Carolina Electric & Gas Company

² Duke Energy Carolinas, LLC

³ Carolina Power & Light d/b/a Progress Energy Carolinas, Inc.

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2005-385-E

IN RE:

Petition of the Office of Regulatory Staff to)	
Establish Dockets to Consider Implementing)	CERTIFICATE OF
the Requirements of Section 1251 (Net)	SERVICE
Metering and Additional Standards) of the)	
Energy Policy Act of 2005)	

This is to certify that I, Pamela J. McMullan, an employee with the Office of Regulatory Staff, have this date served one (1) copy of the **DIRECT TESTIMONY AND EXHIBITS OF A. RANDY WATTS** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

Len S. Anthony
Deputy General Counsel, Regulatory Affairs
Progress Energy Carolinas, Inc.
P.O. Box 1551
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Austin, Lewis & Rogers, P.A.
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Catherine Heigel
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Pamela J. McMullan

April 10, 2007
Columbia, South Carolina